

REMARKS

Reconsideration of the present claims is respectfully requested.

Claims 1, 3, 5-10, 14-22, and 24-38 are pending.

Supplemental Declaration under 37 CFR § 1.132

Applicants submit the attached Supplemental Declaration under 37 CFR § 1.132, which was previously submitted on February 23, 2006, missing page 2.

Rejections under 35 USC § 103

Claims 1, 3, 5-10, 14-22, and 24-38 were rejected under 35 USC § 103(a) as being unpatentable over either of Razavi I and Razavi II; or under 35 USC § 103(a) as obvious over Uwai. Applicants respectfully disagree.

The Action maintains the rejection of Claims 1, 3, 5-12, 14-22 and 24-38 as being obvious in view of Razavi I or II. The Action further maintains the rejection of Claims 1, 3, 5-12, 14-22 and 24-38 as being obvious in view of Uwai. Previous Actions admit that neither Razavi I, Razavi II, nor Uwai disclose or suggest Applicants' recited method for preparing a supported catalyst wherein the catalyst and the activator are first heated above 60°C (above 75°C for Claim 1), prior to being combined with the carrier which has been heated to from 30 to 75°C. However, the Action alleges Applicants' recited limitation of first heating the catalyst and the activator to above 60°C amounts to mere optimization of a results effective variable, which is within the realm of routine experimentation.

In Razavi I and II the catalyst and the activator are combined at a temperature from 15 to 50°C, preferably about 25°C (Razavi I, page 7, lines 3-12; Razavi II Col. 4, lines 31-35). Razavi thus merely discloses combining the catalyst and the activator under ambient conditions. As such, Razavi fails to disclose a separate step of first applying heat to the catalyst and the activator. Razavi exemplifies merely combining the two components and stirring for 10 minutes (See Page 10, lines 17-22, Razavi I.) Likewise, Uwai discloses mere mixing of the components under ambient conditions and thus fails to disclose Applicants' recited heating step.

In contrast, Claim 1 recites a required step (a heating step) of first heating a composition comprising a metallocene catalyst compound and an activator to a temperature of from 75°C to 125°C, followed by a second step wherein this composition of the heated catalyst and the activator are combined with a carrier which has also been heated to 30-75°C.

Accordingly, Applicants do not recite a mere variation of temperature on a known process step in which the temperature is known to be critical, but in fact, recite an entirely separate step which Razavi I, Razavi II, and Uwai each fail to disclose or suggest.

The Action refers to section A of MPEP 2144.05[R-5]:

"Generally, differences in concentration or temperature will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration or temperature is critical. "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955) (Claimed process which was performed at a temperature between 40°C and 80°C and an acid concentration between 25% and 70% was held to be *prima facie* obvious over a reference process which differed from the claims only in that the reference process was performed at a temperature of 100°C and an acid concentration of 10%); see also *Peterson*, 315 F.3d at 1330, 65 USPQ2d at 1382 ("The normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages."); *In re Hoesch ele*, 406 F.2d 1403, 160 USPQ 809 (CCPA 1969) (Claimed elastomeric polyurethanes which fell within the broad scope of the references were held to be unpatentable thereover because, among other reasons, there was no evidence of the criticality of the claimed ranges of molecular weight or molar proportions.). For more recent cases applying this principle, see *Merck & Co. Inc. v. Biocraft Laboratories Inc.*, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), *cert. denied*, 493 U.S. 975 (1989); *In re Kulling*, 897 F.2d 1147, 14 USPQ2d 1056 (Fed. Cir. 1990); and *In re Geisler*, 116 F.3d 1465, 43 USPQ2d 1362 (Fed. Cir. 1997)."

(emphasis added)

None of the cited prior art either encompass Applicants' presently claimed temperature range, nor do the cited prior art provide any evidence or indication that the temperature at which the activator and the catalyst are combined is desirable.

Furthermore, attention is respectfully directed to the next paragraph, Section B of MPEP 2144.05, which states:

"A particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation. *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977) (The claimed wastewater treatment device had a tank volume to

contractor area of 0.12 gal./sq. ft. The prior art did not recognize that treatment capacity is a function of the tank volume to contractor ratio, and therefore the parameter optimized was not recognized in the art to be a result-effective variable.). See also *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980) (prior art suggested proportional balancing to achieve desired results in the formation of an alloy).

(emphasis added)

As stated above, none of the cited prior art provides any disclosure which even remotely recognizes or suggests the heating of the catalyst and the activator prior to contacting with the support is a critical variable which achieves a recognized result. The references merely provide for combining the two components under essentially ambient conditions and then contacting with the support. Accordingly, Applicants' presently claimed invention cannot reasonably be seen as optimization of a results effective variable since no such results effective variable existed prior to Applicants' disclosure.

Furthermore, in the inventive Examples and pictures shown in the Affidavits submitted, Applicants have shown vast improvement that are unexpected in view of the cited prior art.¹

Applicants respectfully request that all rejections be withdrawn and solicit a prompt notice of allowability. In the alternative, Applicants invite the Office to telephone the

¹ Applicants submit herewith complete affidavits and apologize to the Office for the delay in presenting page 2.

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undersigned attorney if there are any other issues outstanding which have not been presented to the Office's satisfaction.

Respectfully submitted,

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Date



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